

$$F_{\nabla} = 2\pi \cdot r^3 \frac{\sqrt{\epsilon_B}}{c} \left(\frac{\epsilon - \epsilon_B}{\epsilon + 2\epsilon_B} \right) (\nabla \cdot I)$$

F_{∇} = Optical force on particle towards higher intensity

r = Radius of particle

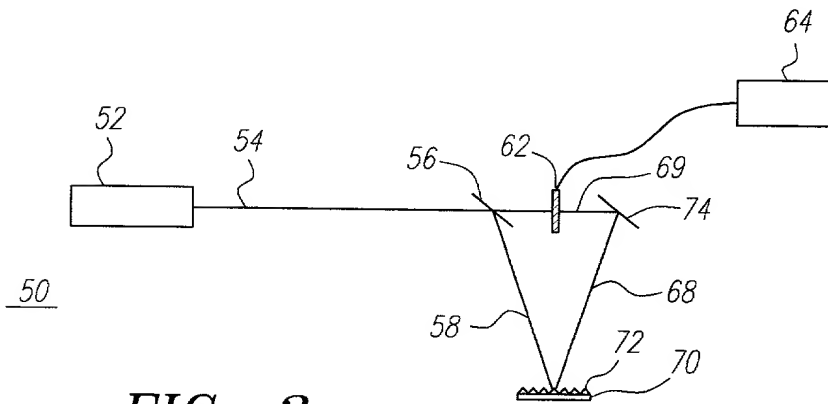
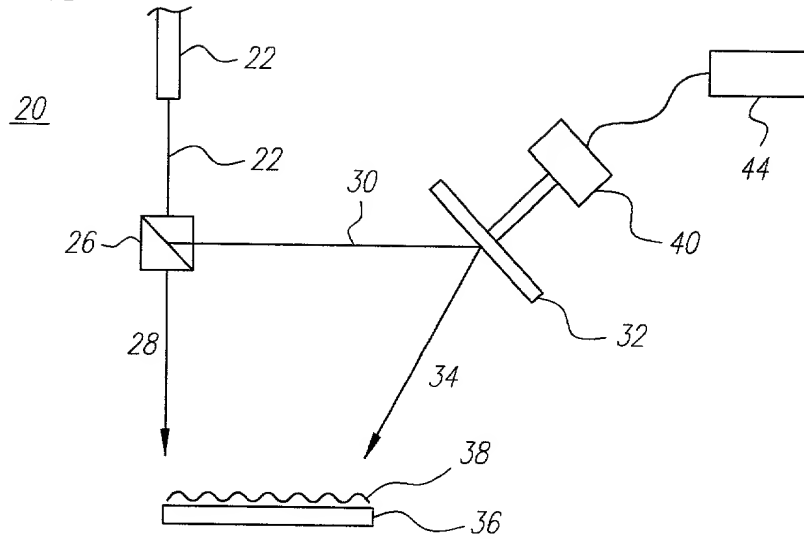
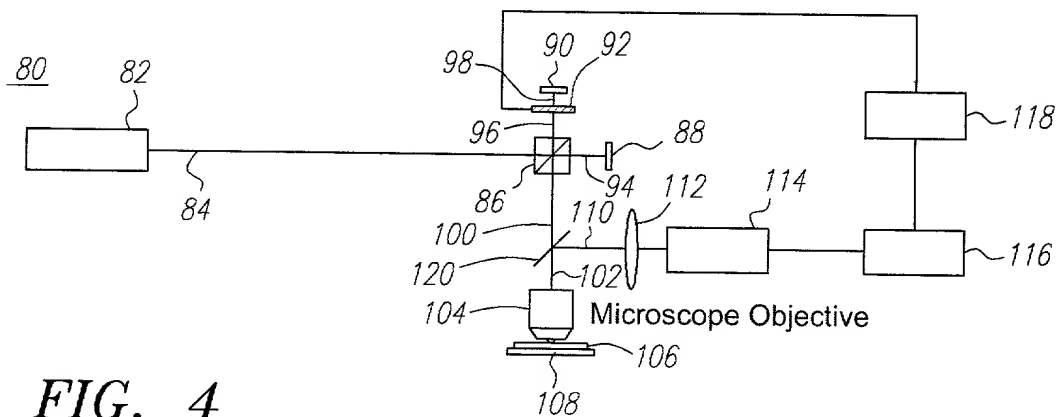
ϵ_B = Dielectric constant of background medium

ϵ = Dielectric constant of particle

I = Light intensity (W/cm^2)

∇ = Spatial derivative

FIG. 1

FIG. 2**FIG. 3****FIG. 4**

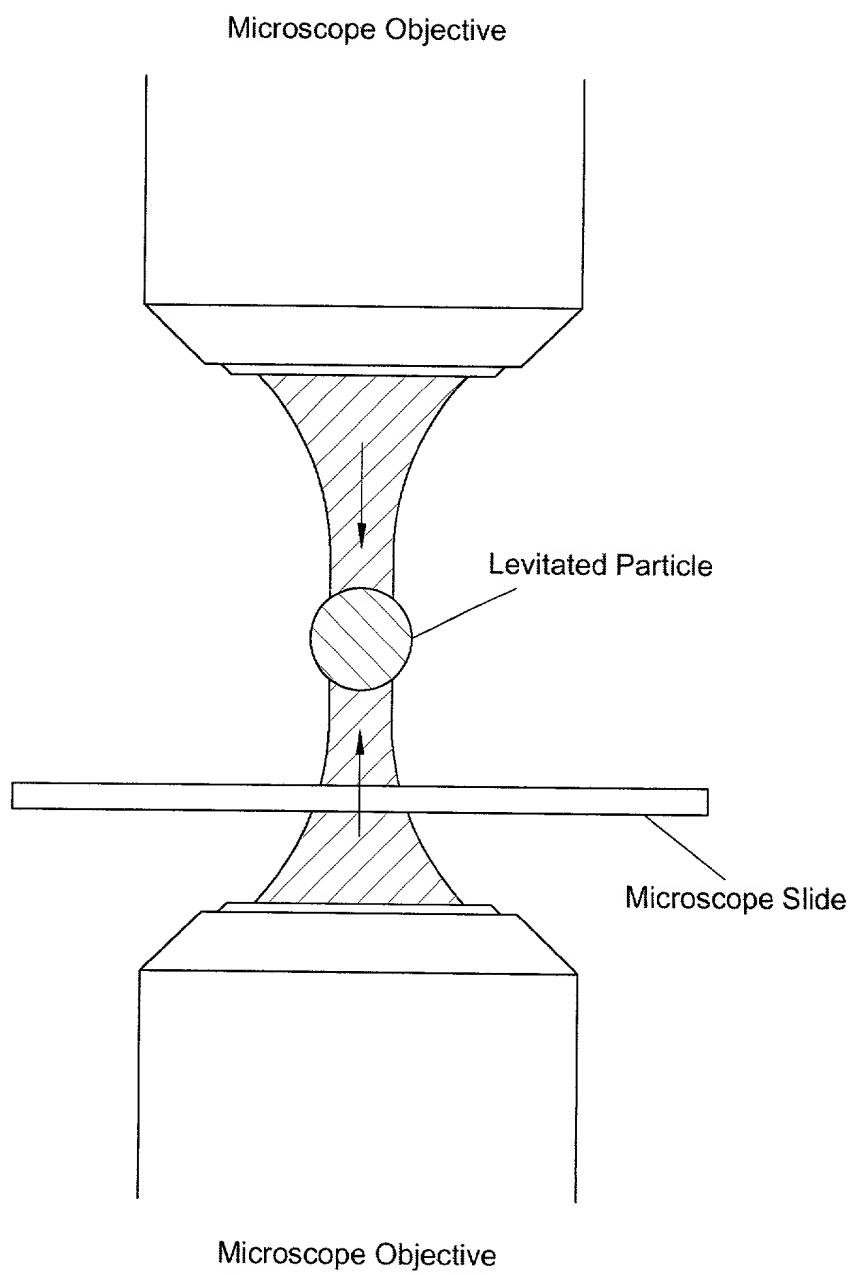


FIG. 4A

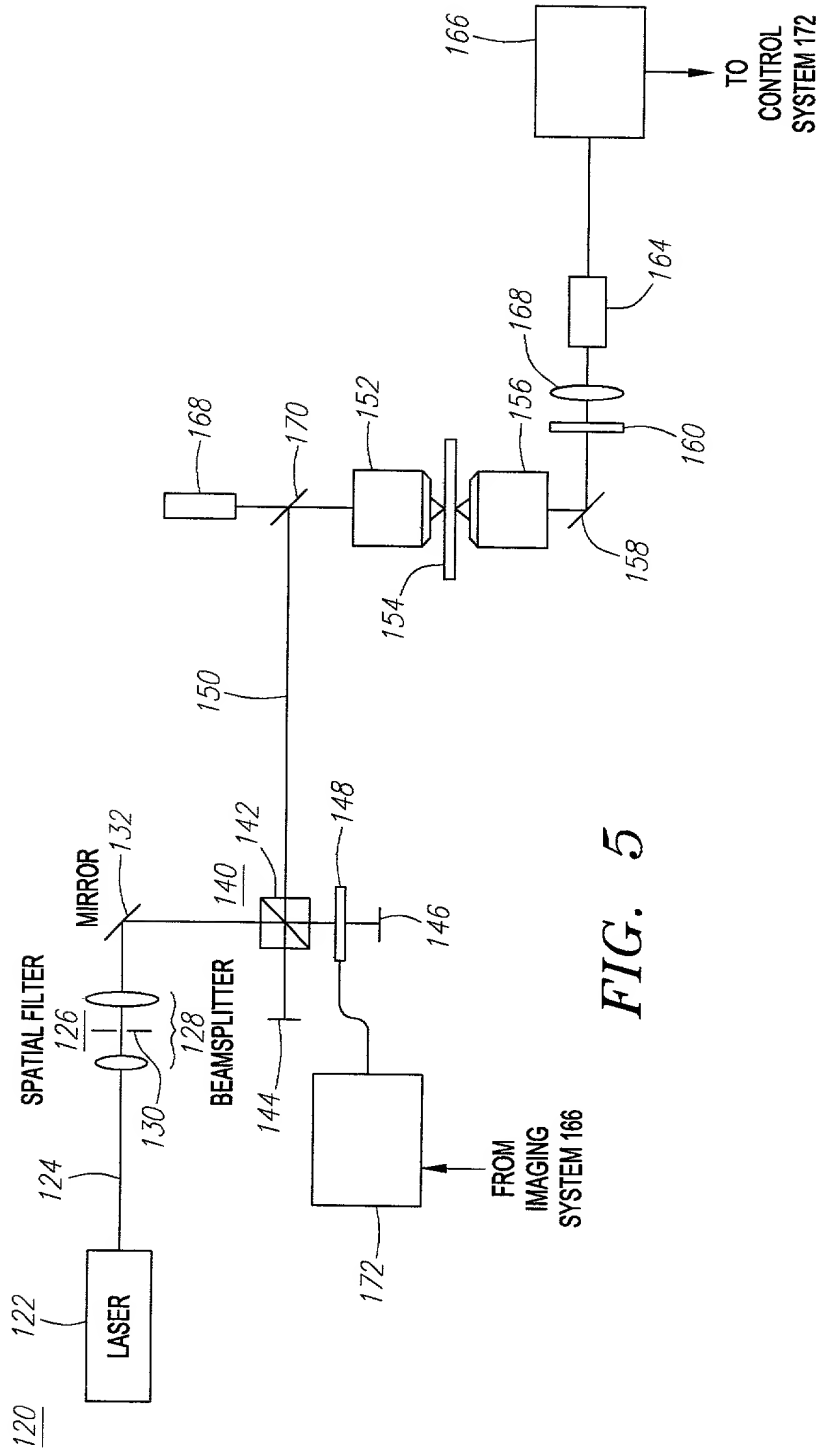


FIG. 5

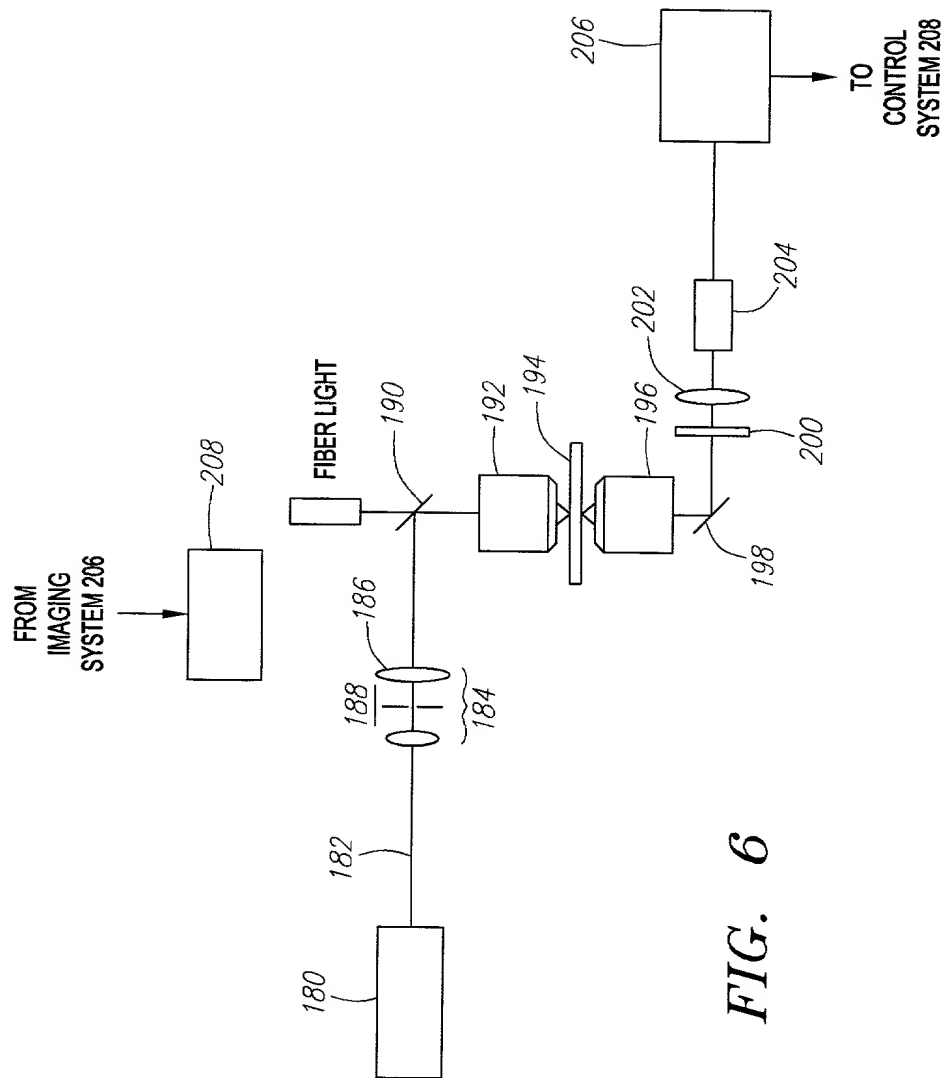
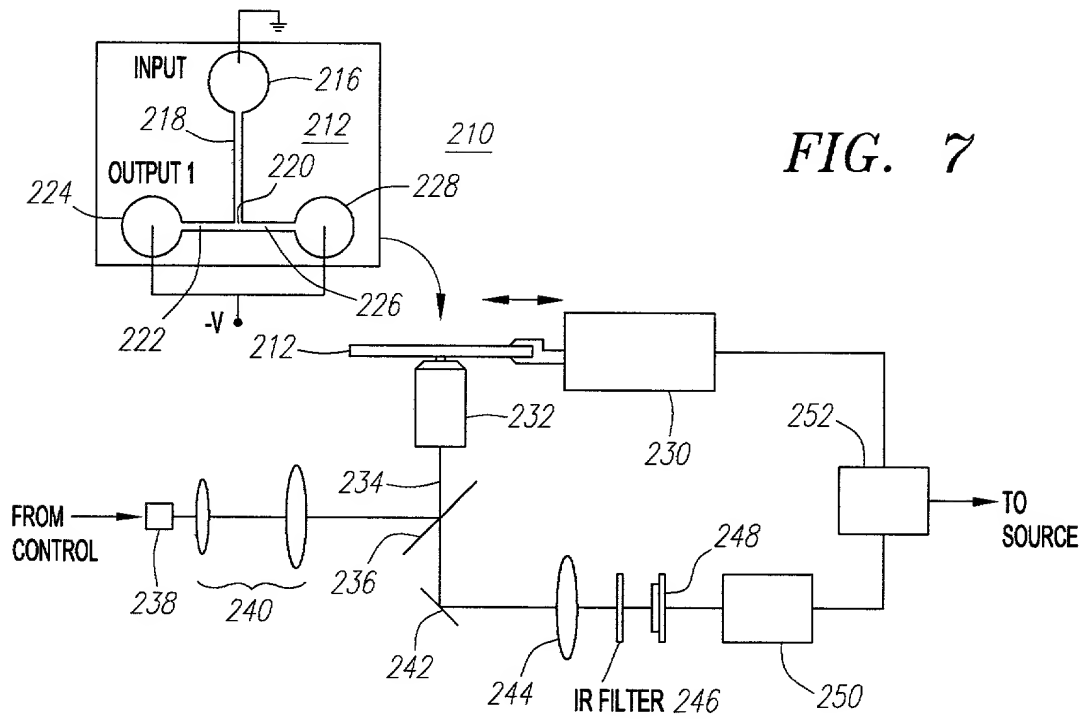
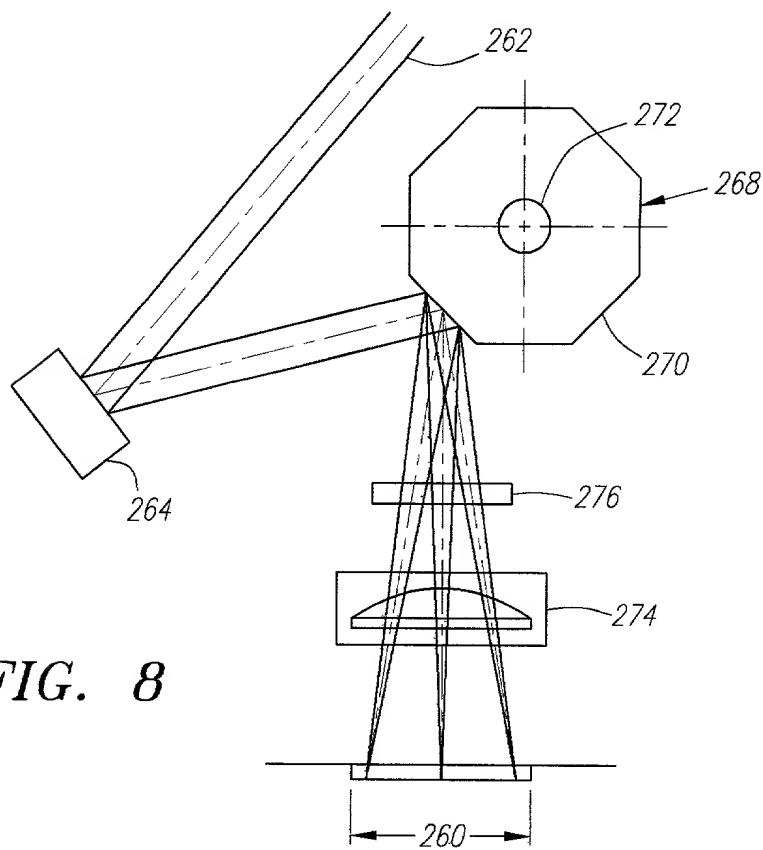


FIG. 6

**FIG. 8**

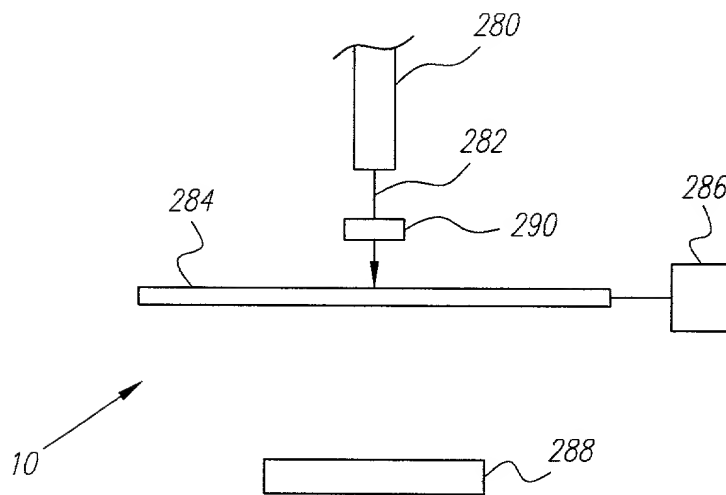


FIG. 9A

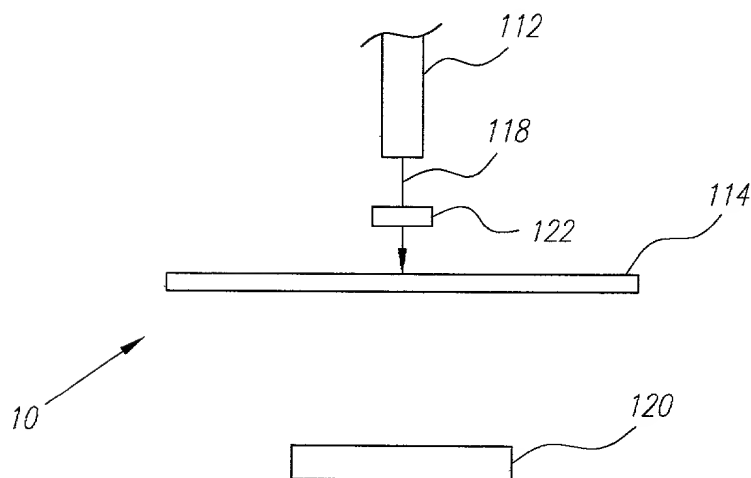


FIG. 9B

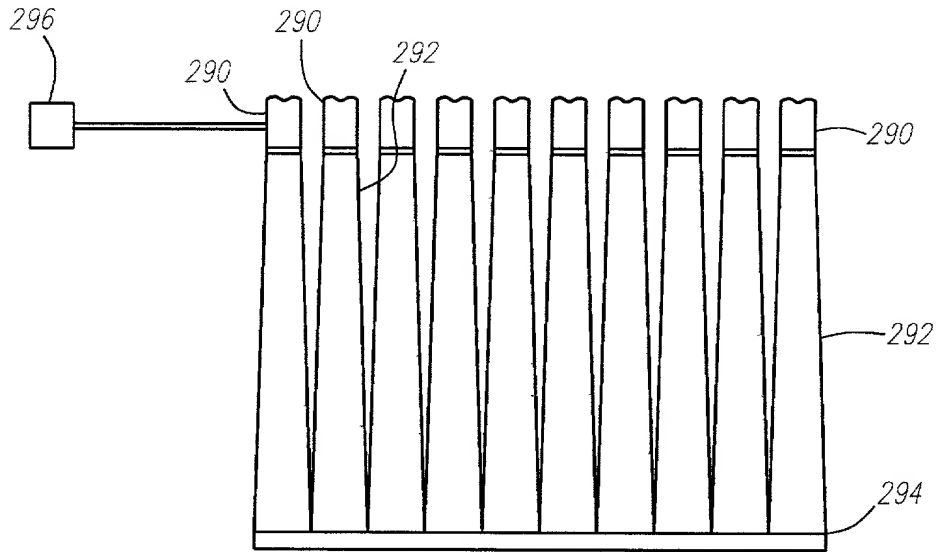
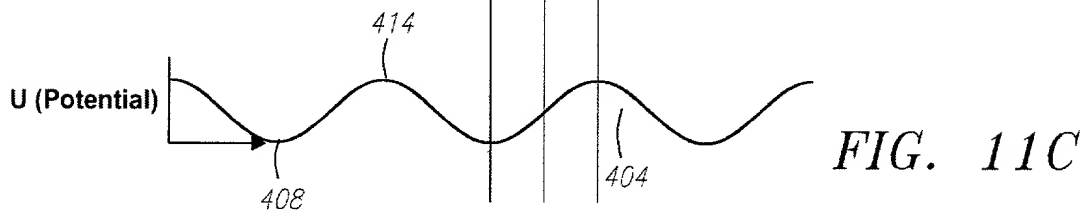
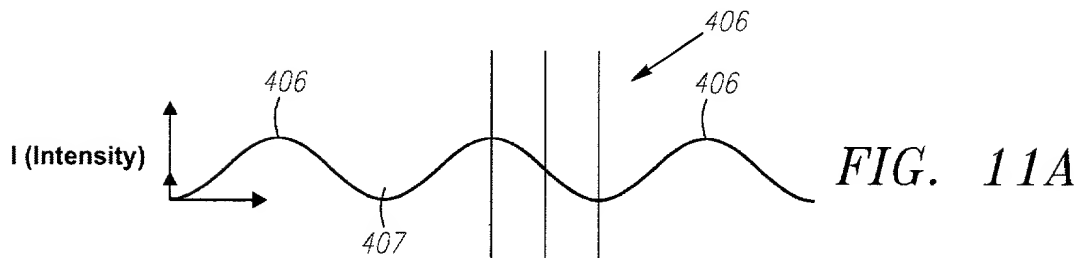


FIG. 10



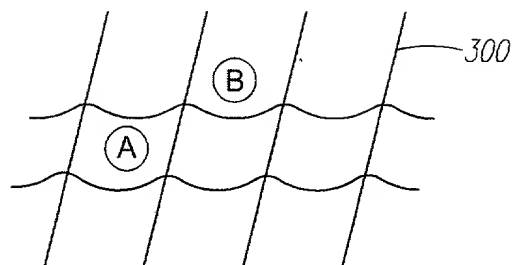


FIG. 12A

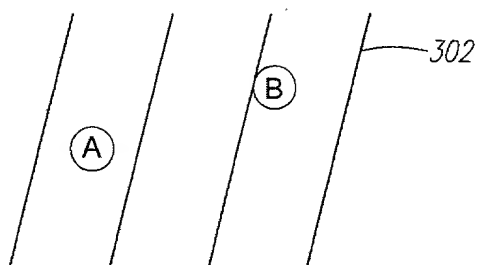


FIG. 12B

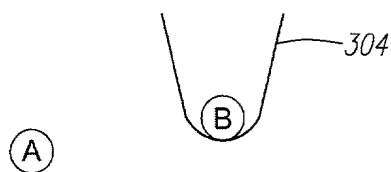


FIG. 12C

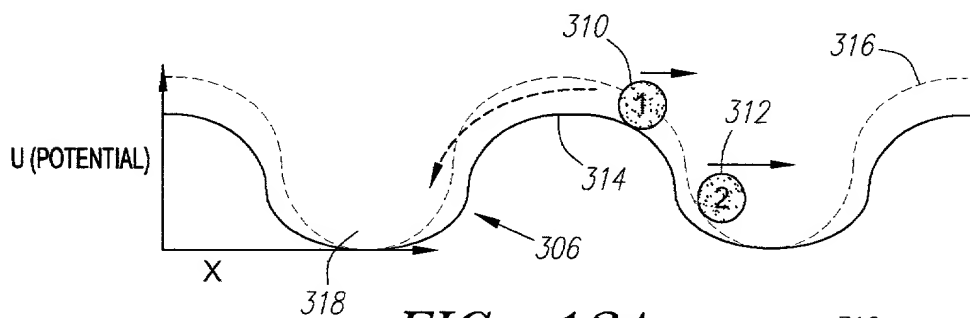


FIG. 13A

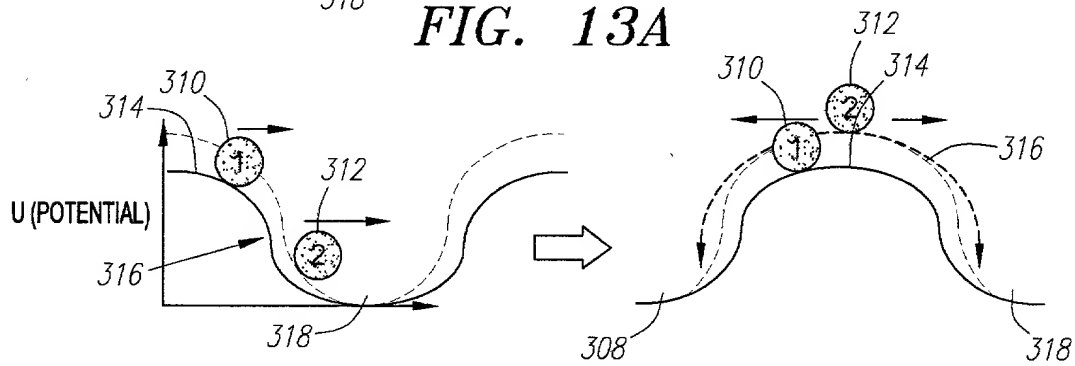


FIG. 13B

FIG. 13C

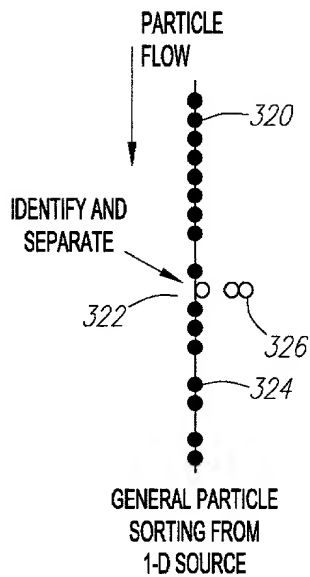


FIG. 14A

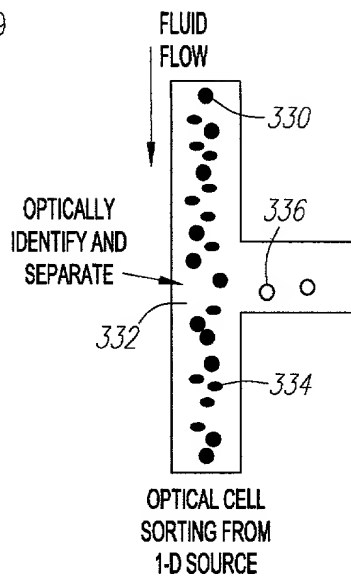


FIG. 14B

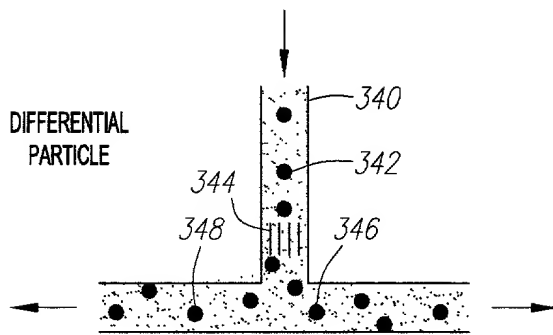


FIG. 15

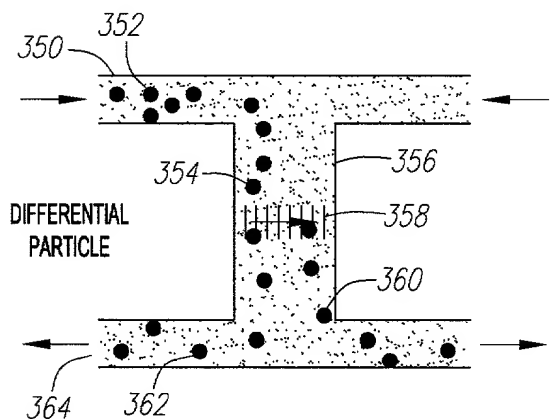


FIG. 16

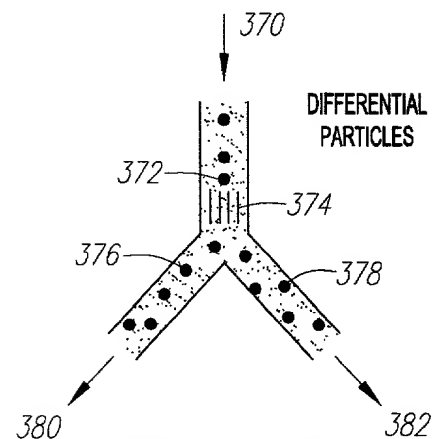


FIG. 17

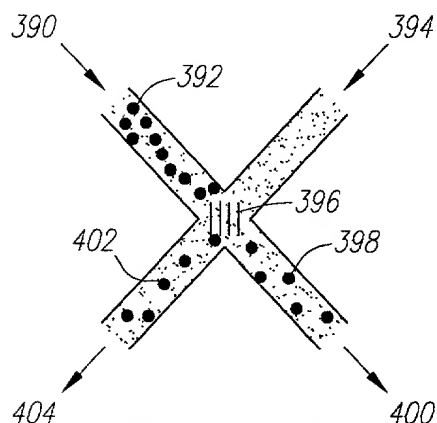


FIG. 18

11/19

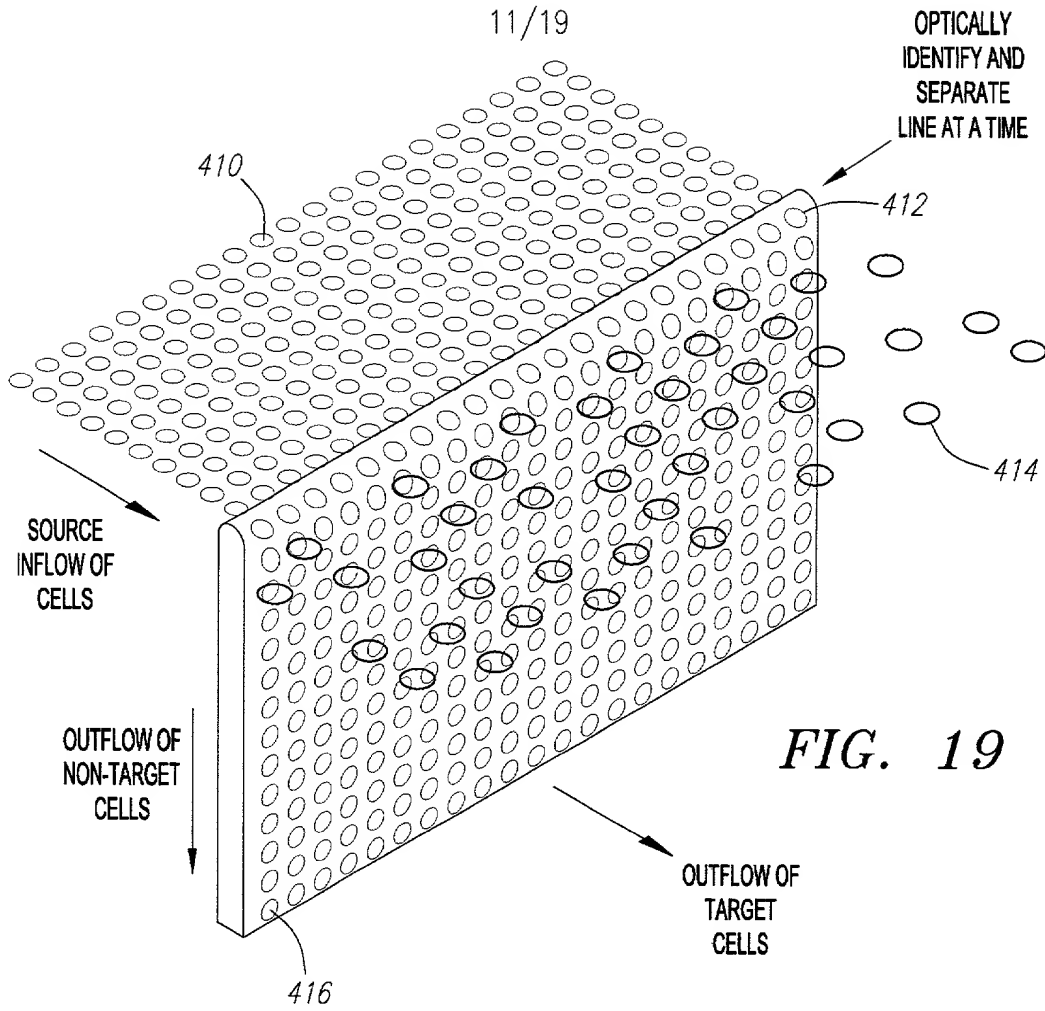


FIG. 19

FIG. 20

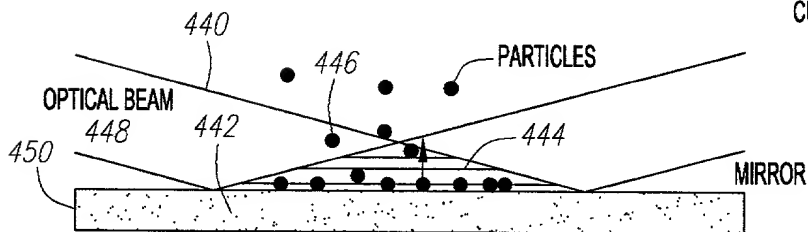
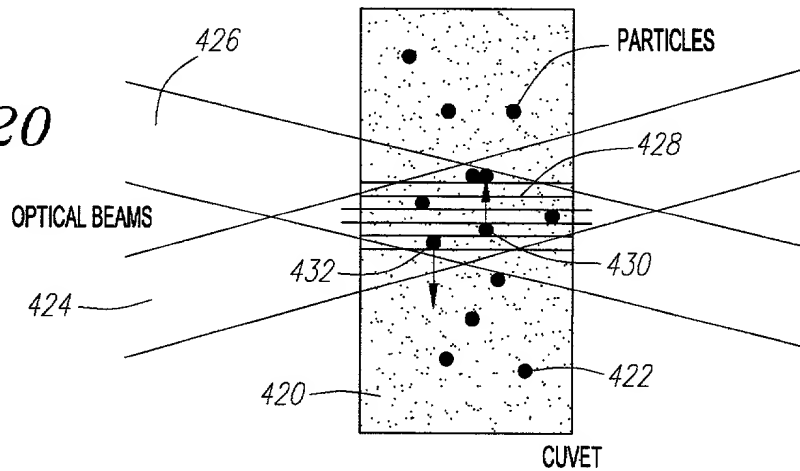


FIG. 21

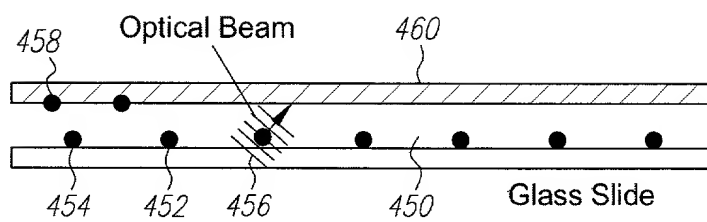
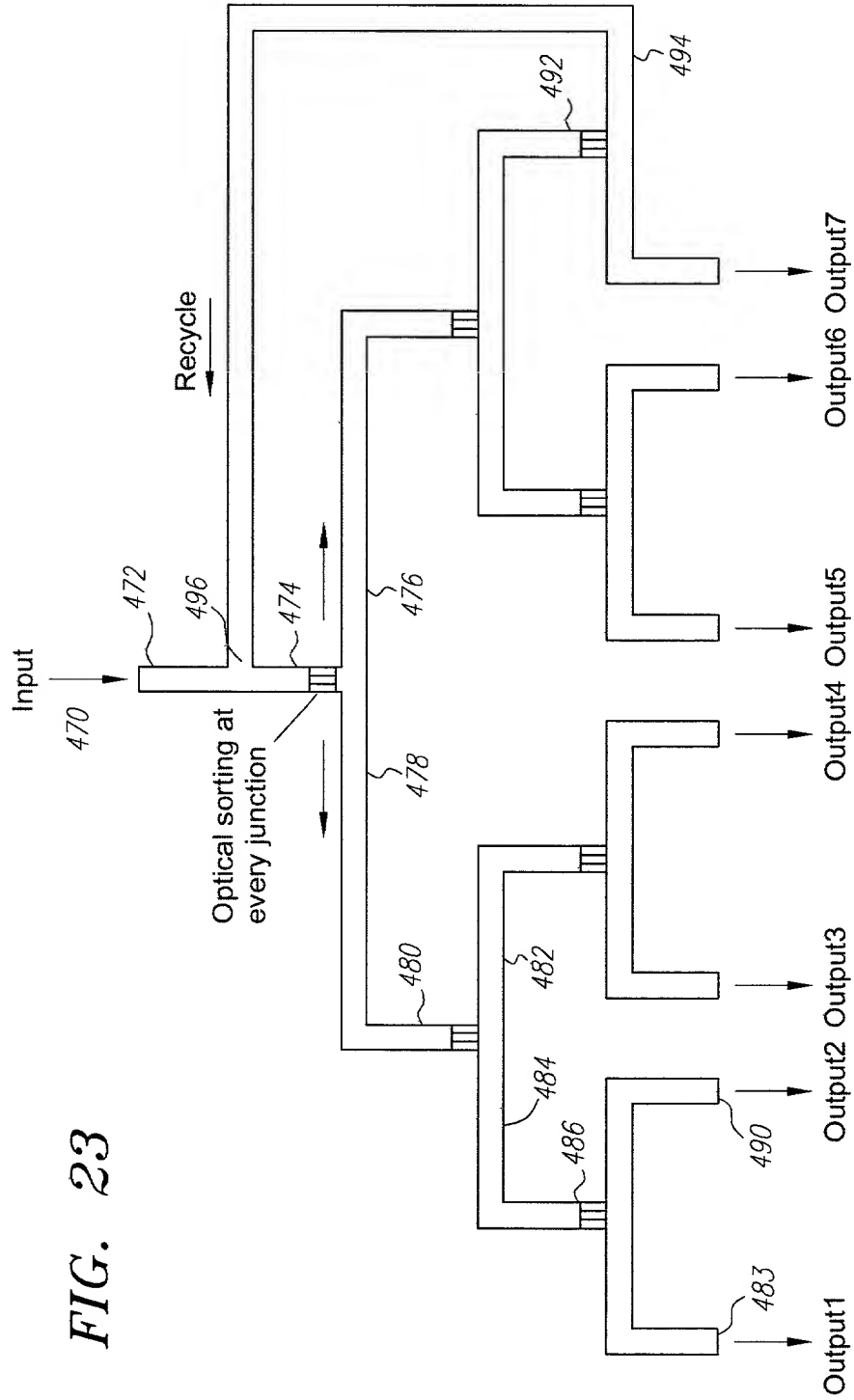


FIG. 22



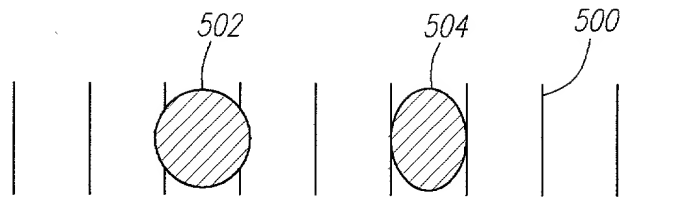


FIG. 24

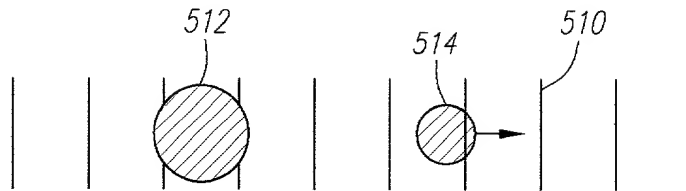
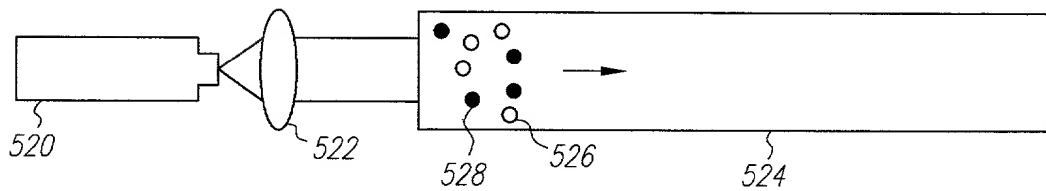


FIG. 25

Before:

SCATTER FORCE SEPARATION



After:

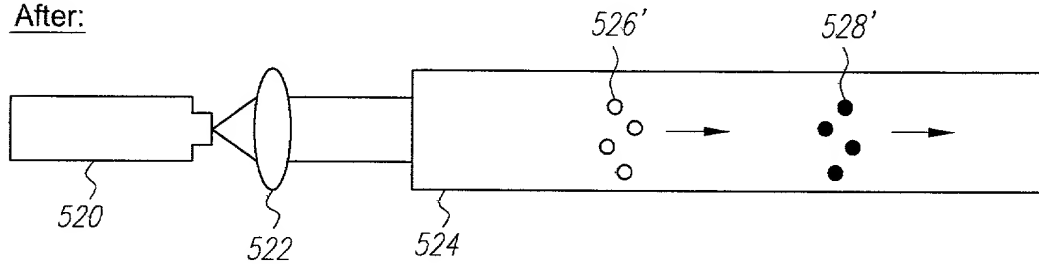


FIG. 26

FIG. 27A

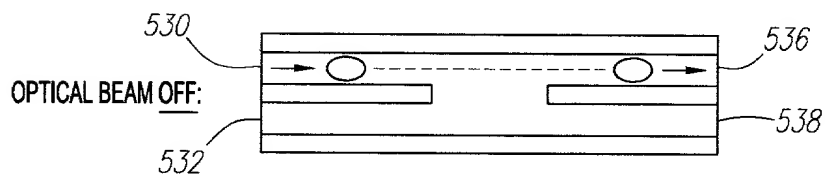
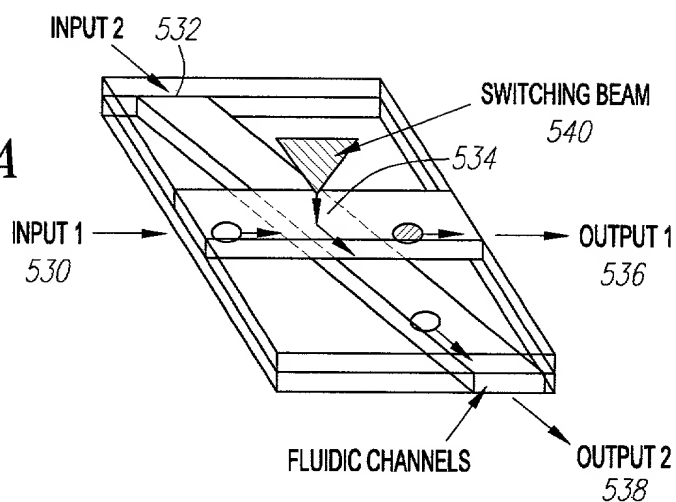


FIG. 27B

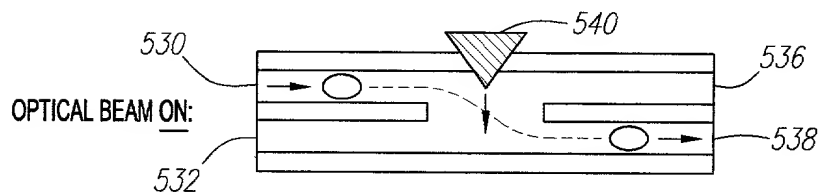


FIG. 27C

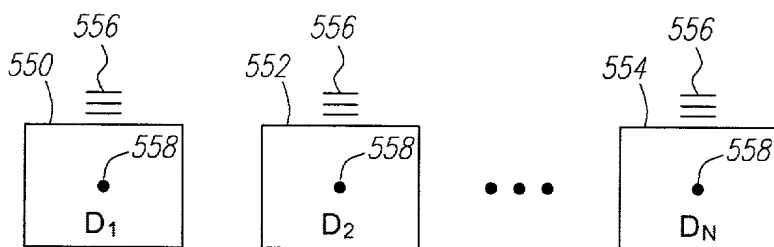
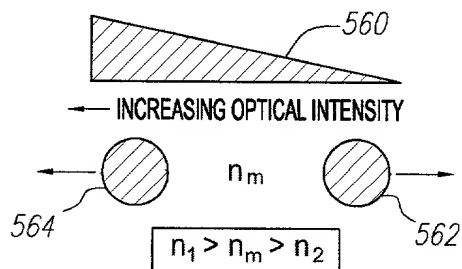
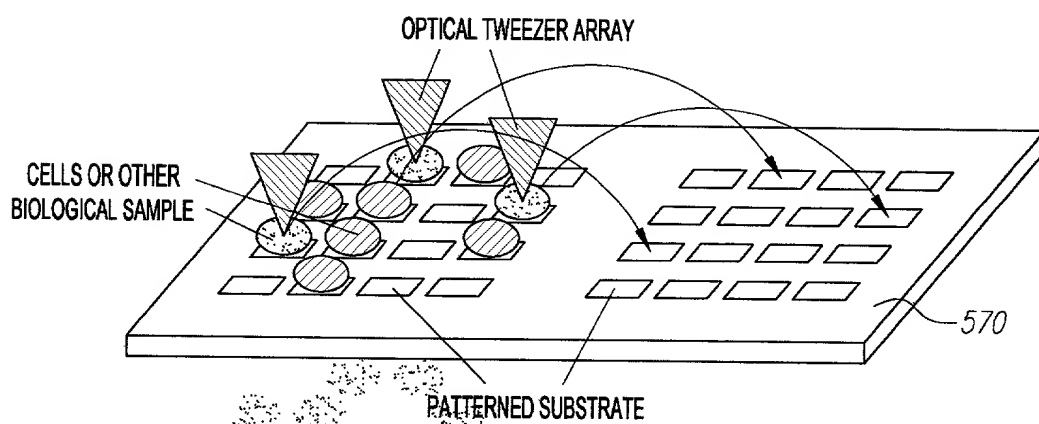
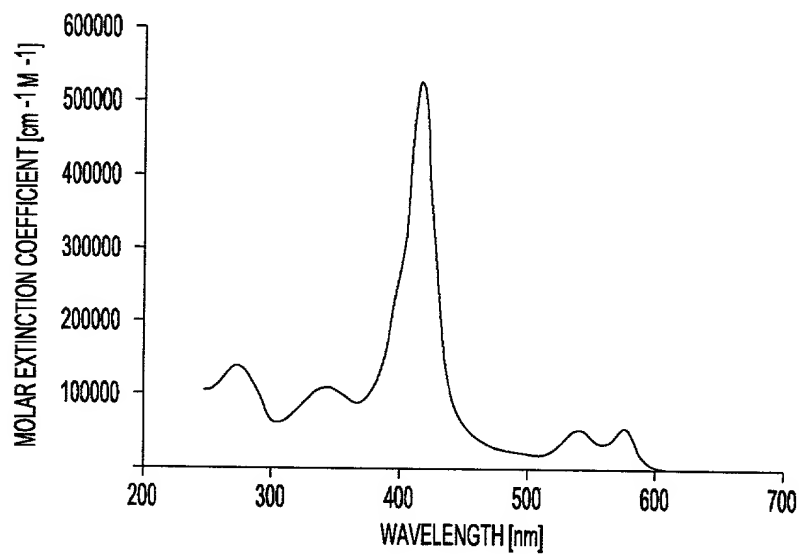


FIG. 28

FIG. 29



*FIG. 30*HEMOGLOBIN - O₂ ABSORPTION SPECTRUM*FIG. 31*

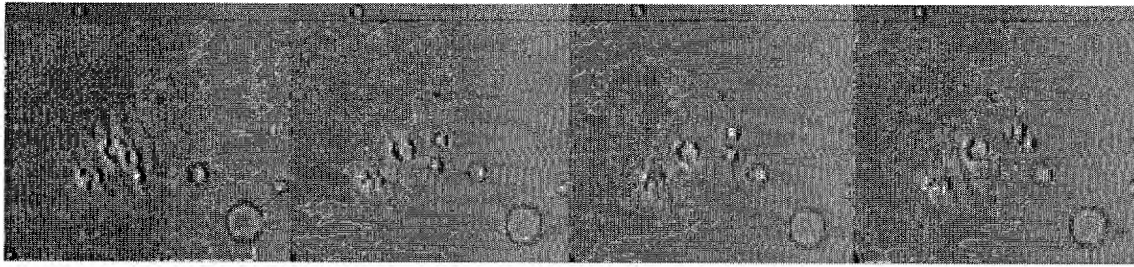


FIG. 32

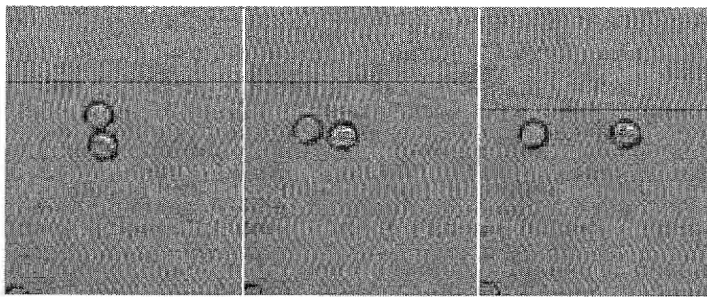
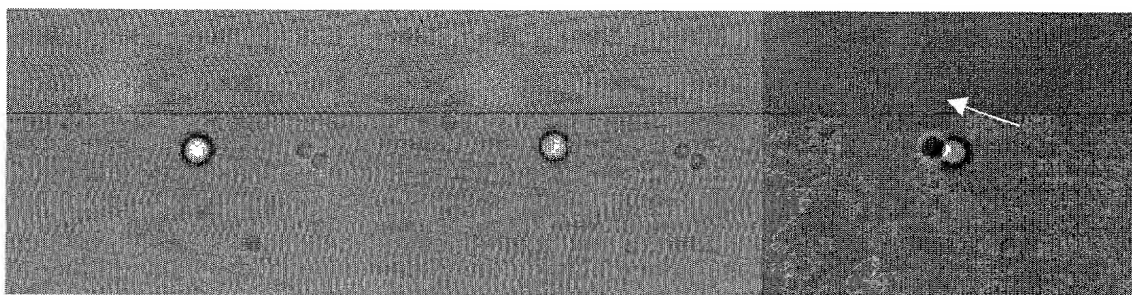


FIG. 33



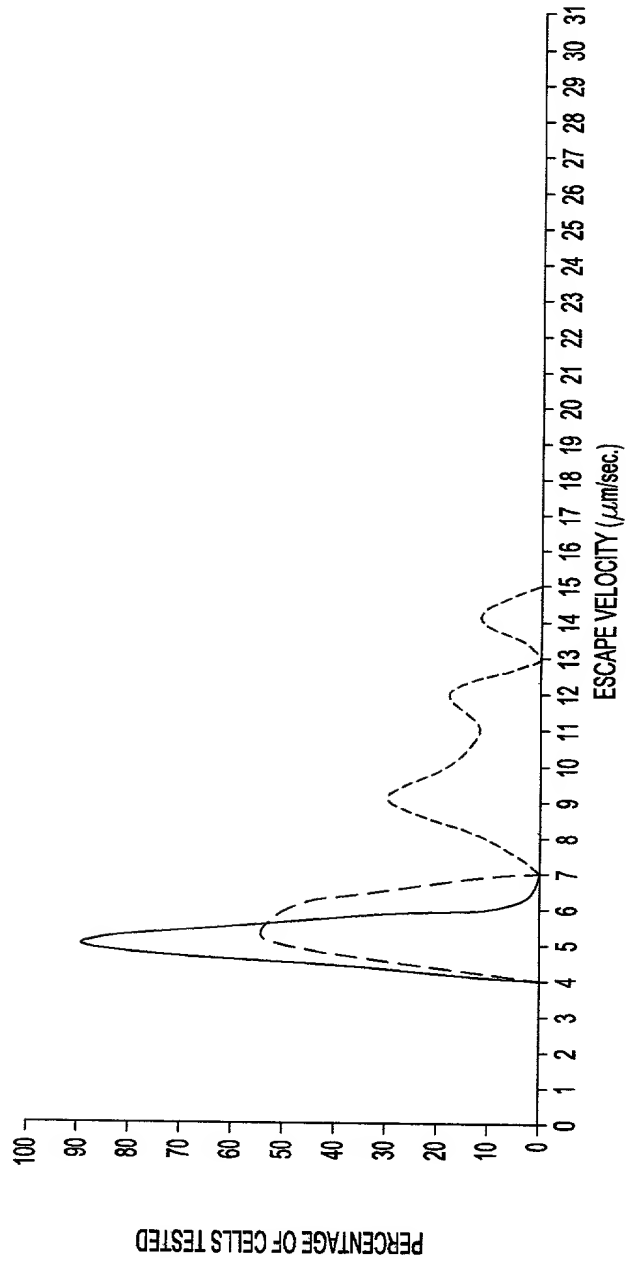
Before

After

Difference

FIG. 34

DISTRIBUTION OF ESCAPE VELOCITIES
READING TAKEN IN PBS/1% BSA BUFFER
RAIN-X COATED SLIDE/CYTOP COATED COVERSIP



— RBC, INDIVIDUAL 1
- - - RBC, INDIVIDUAL 2
. . . WBC, INDIVIDUAL 2

FIG. 35

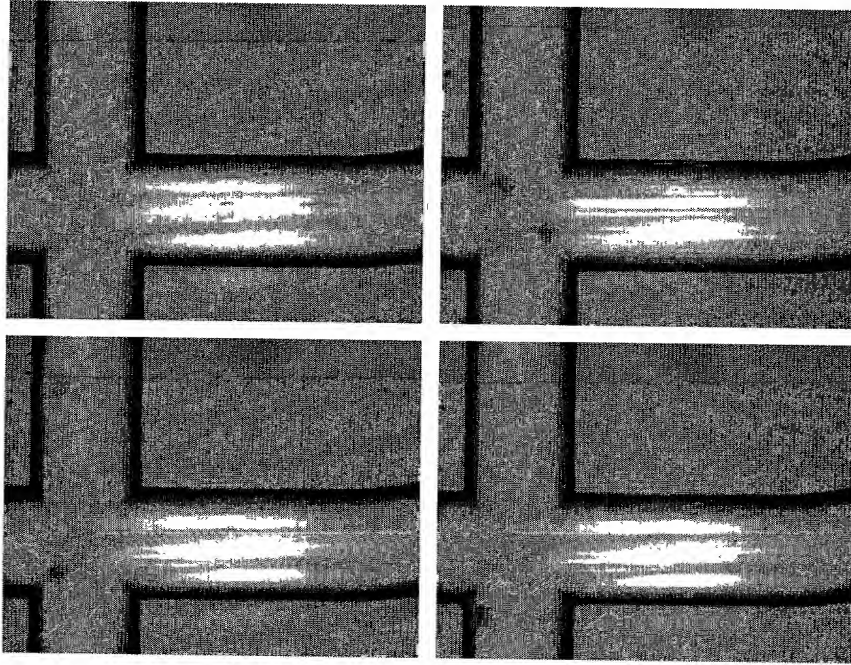


FIG. 36